Work Order ID 107274 September-23-13 11:46:18 AM					Page 1						
Item ID: Revision ID: Item Name:	D3016-041 Seat Frame Asse	embly		Accept	*N90ก็	<u>1040</u>	100)*	Setup St	art * \	IS1* IS2*
Start Date: Required Date: Reference:	10/01/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ! Customer:	ID:					10.12
Approvals:		: MUJ	Date: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		*	ate:			•	art *N	IR1* IR2*
Sequence ID/ Work Center II	D I	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. r Stamp
Draw Nbr		ion Nbr									
D3016 100 *100* Large Fab Large Fab		Large Fab Memo	orod Batch: 1188 es as per Dwg D3016	75 0.00 0.00				0	R	13-10	-8
		DT8597 4-Transfer de		s per Dwg D3016 using w 1 and D3021-041 in seat f Iwg and weld							
*110	,	QC9- Inspect visual per (QSI004- Fusion Welds	0.00				_/ /		W 13	-10·08
QC		Memo		0.00							

Quality Control

			DQA:	Date:
ICB.	Ves / No	WORK ORDER NON-CONFORMANCE / LIPDATE	,	

QA Closed: Date: **AGAINST DEPARTMENT/PROCESS** DISPOSITION Work Order: Skid-tube Water Jet Engineering Crosstube Rework Machining Prod. Eng. Coor. Quality Small Fab Part No. Scrap Rec/Store/Packaging Other Use-as-is Thermoforming Finishing Work Order Update Composite Supplier Large Fab NCR No. Description of work order update Action Sign & Initial Root Verification or Non-conformance **Chief Eng** Date QC Inspector Cause Date Step Qty Description Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Pressure/Forced Ovalized Bending Bend Grain BOM/Route Centre Not Concentric to O/S Hardware Over/Under tolerance Temperature/Cure Broken/Damaged Inspection Incomplete Part Incorrect Weld Cracks Instructions Incomplete/Unclear Crushed/Crimped Burrs Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

H-/FORMS/Quality	Assurance\approv	ed QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Work Orde September-23-1				*107	7274*							Page 2
Item ID: Revision ID:	D3016-041	ccombly		Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*
Item Name: Start Date: Required Date: Reference:	Seat Frame A 10/01/13 10/01/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:						
Approvals:		an:	Date:	Tooling: SPC (Y/N):		ate:ate:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 120 *120* QC Quality Control	D	Operation Description QC5- Inspect part compl	eteness to step on W/O	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Qt	•	Reject Number つら	Insp. Stamp
130 *130* Powdercoat Powder Coating	18	START TIM	screws of fitting ends IE:	0.00				lху	14	W/J	113,	/10/00

140 ***110*** QC3- Inspect Part Finish

0.00

140

Memo

0.0

Quality Control

1x & Il 13/10/66

0.00

											DQA:	Dat	.e:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	MANCE / UPDATE		QA Closed:	Dat	te.	
		· · · · · · · · · · · · · · · · ·									· · · · ·		<u></u>	
Work Orde	er:					DISPOSITION			AGA	AINST DE	PARTMENT,	/PROCESS		
Part I	- _ No					Rework Scrap		ı	Machining Sma	stube ıll Fab	1	Water Jet d. Eng. Coor.		Engineering Quality
NCR I	No	н.,	·			Use-as-is Work Order Update			* —	ishing posite	Rec/Sto	re/Packaging Supplier	\exists	Other
Root					Descri	ption of work order update	Π	Initial	Action		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Description		Date	Verification	<u> </u>	QC Inspector
Doc/Data	Ш													
Equip/Tooling	Ш													
Operator	Ш													
Material	Ц						İ							
Setup	Ц													
Other :	Ц			1										
Process	Ш													
Supplier	Ш													
Training							Ì							
Unapproved														
			·			F	AUL	T CATE	GORY					
Landi						General		,		_	1	_	_	
	$\boldsymbol{\vdash}$	Bending				Bend	L	Grain		<u> </u>	Ovalized	1		ressure/Forced
	Ц	Centre No	ot Concei	ntric to	O/S	BOM/Route	$oxed{oxed}$	Hardwa			Over/Under	tolerance	_	emperature/Cure
	⊢	Cracks				Broken/Damaged	$ldsymbol{le}}}}}}$	1 `	on Incomplete	<u> </u>	Part Incorred	⊢	—	/eld
	\vdash	Crushed/0	Crimped		<u> </u>	Burrs	$ldsymbol{ld}}}}}}$	4	ions Incomplete/Unclear	ļ	Part Lost/Mi	ssing	w	rong Stock Pulled
	\vdash	Cuffs				Contamination		Mainte			Part Moved			
		Heat Trea	t			Countersink		Mislabe	led		Positioned V	Vrong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

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Work Ordenserver September - 23 - 1				*107	7274*						Page
Item ID: Revision ID:	D3016-041	<u> </u>		Accept	*N900	040	100)*	Setup St	17	JS1*
Item Name:	Seat Frame A	Assembly							St	top *	IS2 *
Start Date:	10/01/13	Start Qty: 1.00	*1*		Cust Item I	D:					
Required Date:	10/01/13	Req'd Qty: 1.00	*1*		Customer:						
Reference:			-								
Approvals:	Process P	lan:	Date:	Tooling:	Da	ate:				art *N	JR1*
	QC:		Date:	SPC (Y/N):	Da	ate:			St	top *N	JR2*
Sequence ID/ Work Center I	D	Operation Description	(°-A	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Numbe	Insp. r Stamp
150		Identify as per dwg & St	ock Location:	0.00							
150 Packaging		Memo		0.00				14			H.

160

Packaging

QC21- Final Inspection - Work Order Release

0.00

160

Memo

0.00

Quality Control

1) Pel (3-10-10)

Page 3

|--|

MODE ODDED NON CONFORMANCE / HIDDATE

Date:

DQA:

NCR: YO	es / No				WORK ORDER NON-C	CONFC	JKIV	IANCE / OPD		QA Closed:	Date	· !:
		*			DISPOSITION				AGAINST DE		/PROCESS	Į.
Work Orde Part N					Rework Scrap]	٨	Skid-tube	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR N	0	- 10 <u>(</u> 10 100	· · · · · · · · · · · · · · · · · · ·		Use-as-is Work Order Update	Th		oforming Large Fab	Finishing Composite	Rec/Sto	e/Packaging Supplier	Other
Root				Descri	ption of work order update	Initia	al	Actio	on	Sign &		. ,
Cause	Date	Step	Qty		or Non-conformance	Chief (Eng	Descri	ption	Date	Verification	QC Inspector
oc/Data quip/Tooling												
Operator Material												
etup Other				ŀ								
rocess					•							·
upplier									•	٠.		
raining Inapproved												
					F	AULT CA	ATEG	ORY				
Landin	g Gear				General							
	Bending				Bend	Gra	ain			Oyalized	L	Pressure/Forced
. [Centre N	ot Conce	ntric to	o/s	BOM/Route	Har	dwar	e .		Over/Under	tolerance	Temperature/Cure
L	Cracks			ļ	Broken/Damaged	Insp	pectio	on Incomplete		Part Incorred	ct	Weld
	Crushed/	Crimped			Burrs	\vdash		ons Incomplete/Ui	nclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs	•			Contamination	Ma	inte	nance	<u> </u>	Part Moved		
	Heat Trea	at			Countersink	Mis	label	ed		Positioned V	· ·	
	Inspectio	n Strip in	Tube		Cut Too Short	Mis	read			Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes	Offs	set					
	Torque V	Vaves in I	Extrusio	n 🗌	Drawing	Out	t of C	alibration				
: [Turning S	equence	!		Finish	Out	t of Se	equence				
	Waye/Tw	ist in Tul	he		Teolio	Пош	ahist	Dimensions				

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Picklist Print

September-23-13 11:46:17 AM

Page 1

Work Order ID:

107274

Parent Item:

D3016-041

Parent Item Name:

Seat Frame Assembly

Start Date: 10/01/13

Required Date: 10/01/13

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measur		Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NT0.750W.049		Purchased	No			100	f	167.6682	4.3	4.5263158		•	
4130 RD Tube .750 x.049V	V						-		and the second	E 10	-10-7		
	-			<u>Location</u>		Loc Oty	.]	Loc Code	•				
				MAT033		167.6681893							
pr.					3339	2.1217893			4.1 4	17 50	,)		
					5 <u>252</u> 5313	29.3164 136.23			7	'//-			
M4130NT0.500W.049		Purchased	No	12	3313	100	f	55.0860	4.3	4.5 <u>2</u> 63158	2		
4130 RD Tube .500 x.049V	N	Furchased					•		October 1980	E /	3-10-	7	
				Location		Loc Oty		Loc Code					
				MAT032		55.086							
					1025	1.82					·		
					3339	. 33.556		*	4.1	11 4	6-11		
		•		12	4293	19.71							
M4130NT1.000W.120		Purchased	No			100	f	33.4825	1.5	1.5789474 <i>F</i> 7	1 13-10-	- 2	
4130 RD Tube 1.00 x .120	wall										<u> </u>		eramana navara sarárranara
				Location		Loc Oty]	Loc Code	•				
		M17656 X	150	MAT033.	4000	33.4825				<u> </u>			
		1411.620 X	ربع، ا		4293 126545	9.71 ⁻ 23.7725							
D3016-17		Manufactured	No	1111	120343	100	Each	0.0000	2				
Gusset				azz			Laci	0.0000	-	A-1.	3-10-	7	
D3016-13		Manufactured	0674°	17 /		100	Each	15.0000	2	2	•		
Bracket		Manufactured								R-1.	3-10-	7	
				Location		Loc Oty]	Loc Code					
				WA001		. 14							
				10	0818	14				}			
				WA002		1							
				92	380	1							

			K
· ·	DO 4 ·	Date:	
	DQA:	Date.	
MODE ODDED NON-CONFORMANCE / LIDDATE			

NCR: Y	'es	/ No				WORK ORDER NON-O	COL	NFORI	MANCE / UPI	DATE			
											QA Closed:	Date	
Work Orde	er: _		,			DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	_
Part N	-					Rework Scrap Use-as-is Work Order Update		1	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update		Initial	Act	ion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved								- 1200					
		 					AUL	T CATE	GORY				
Landi		ear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection Ripples in	Crimped it n Strip in i Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instruct Mainte Mislabe Misread Offset	ion Incomplete ions Incomplete/U enance eled	Jnclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ssing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Turning S	equence			Finish		Out of 9	Sequence				•

Outside Dimensions

Wave/Twist in Tube

Folio

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September-23-13 11:46:17 AM

Work Order ID: Parent Item: Parent Item Name:	107274 D3016-041 Seat Frame Assembly						Date: 10/01/13 Qty: 1.00	Required Date: 10/01/13 Required Qty: 1.00
D3016-15 Gusset	Manufactured	No		100	Each	17.0000	2 ————————————————————————————————————	13-10-7
			Location	Loc Qty		Loc Code		
			WA	13			-	
			<u>97657</u>	13			~~~~	<u> </u>
			WA001	. 3				_
			95695	3				_
			WA002	1				
			90616	1				
D3020-1 Fitting	Manufactured	No		100	Each	35.0000	4 EZ	4 13-10-7
			<u>Location</u>	Loc Qty		Loc Code		
			WA	13				_
			100923	13				_
			WA002	22			·	
			106789	22				

DQA:	Date:	
------	-------	--

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

									QA Closed:	Date	e:	
Work Order:					DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Work Orde					Rework	1 I	Skid-tube	Crosstube	1	Water Jet	Engineering	
Part No.			Scrap		Machining Small Fab		Prod. Eng. Coor.		Quality			
					Use-as-is	4 1	Thermoforming Finishing		Rec/Store/Packaging		Other	
NCR N	lo				Work Order Update]	Large Fab Composite		Supplier			
Root			Ι	Descri	tion of work order update	Initial	Initial Action		Sign &			
Cause	Date	Step	Qty	ļ	or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector	
Doc/Data												
Equip/Tooling												
Operator						Ĭ						
Material												
Setup		į										
Other		1										
Process												
Supplier												
Training		ł										
Unapproved												
					F.	AULT CATE	GORY					
Landir	ng Gear				General				_			
	Bending				Bend	Grain	Grain		Ovalized Pressure/		Pressure/Forced	
	Centre N	ot Conce	ntric to	o/s	BOM/Route	Hardw	Hardware		Over/Under tolerance		Temperature/Cure	
	Cracks				Broken/Damaged	Inspect	tion Incomplete		Part Incorre	ct	Weld	
	Crushed/Crimped			Burrs	Instruc	Instructions Incomplete/Unclear		Part Lost/Missing Wrong Stock Pull		Wrong Stock Pulled		
	Cuffs				Contamination	Maint	enance		Part Moved		 -	
	Heat Treat Inspection Strip in Tube			Countersink	Mislab	Mislabeled		Positioned Wrong				
			Cut Too Short	Misrea	Misread		Power Loss/Surge		Other			
	Ripples i	n Bend			Drill Holes	Offset						
	Torque \	Waves in E	Extrusio	n T	Drawing	Out of	Out of Calibration					
	Turning	Sequence		ļ	Finish	Out of	Sequence					
	Waye/Twist in Tube				Folio	Outsid	o Dimonsions					

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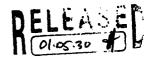
	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA					
i	CHECK	ÉD ,	APPROVED	DRAWING NO.	REV. A	
		1	#	D3016	SHEET 1 OF 3	
	DATE			TITLE	SCALE	
	01.0	5.18		SEAT FRAME ASSEMBLY	NTS	
	Α		01.05.18	NEW ISSUE		

QTY	PART NUMBER	DESCRIPTION	MATERIAL
Х	D3016-041	SEAT FRAME ASSEMBLY	N/A
1	D3016-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3016-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3016-5	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
2	D3016-7	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
1	D3016-9	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-11	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-13	BRACKET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-15	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-17	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3020-1	FITTING	N/A

NOTES

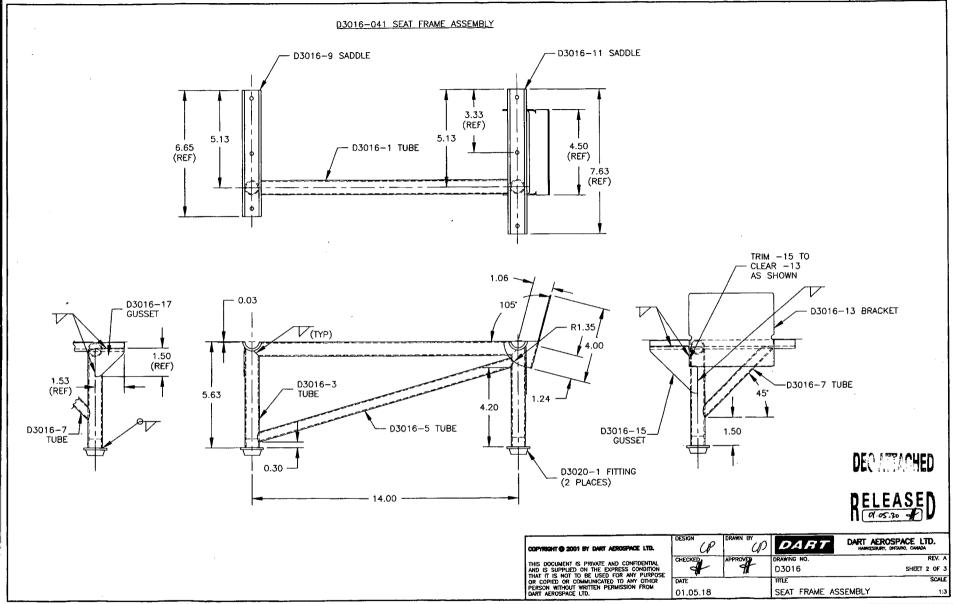
- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

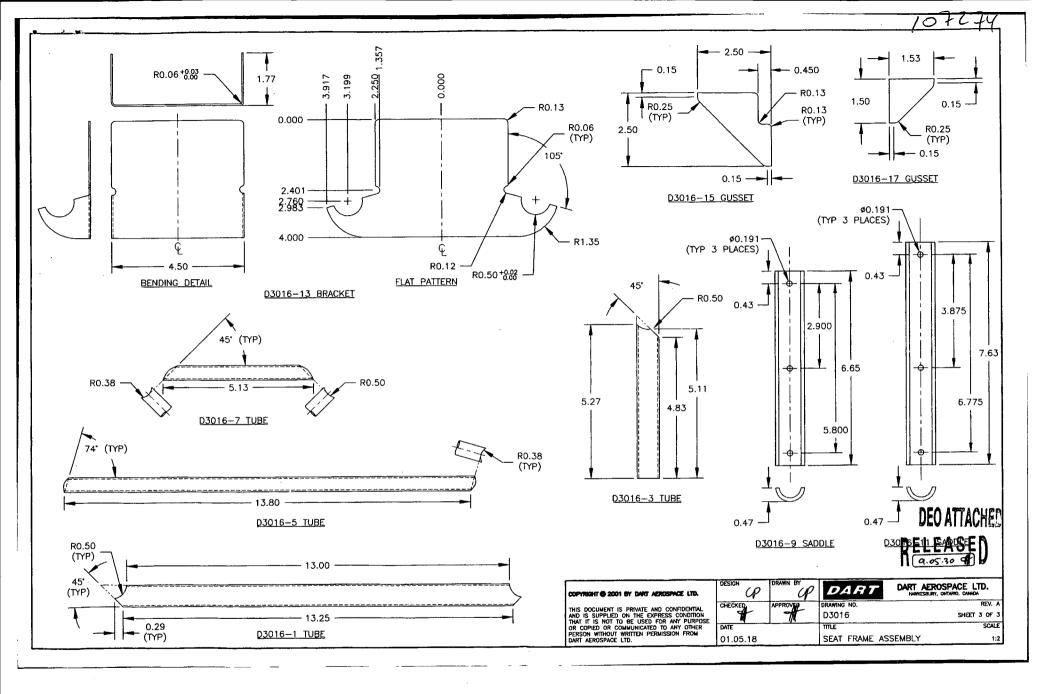
DEO ATTACHED



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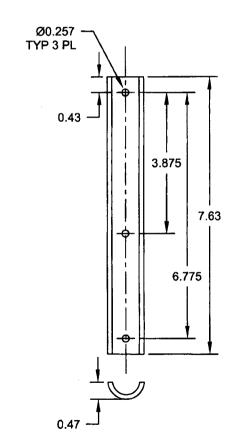
DRAWING NO.	TITLE	REV. A	DART AE	ROSPACE LTI	D.E.O. NO.		SHEET NO.	SCALE
D3016	SEAT FRAME ASSEM	BLY	ENGINE	ERING ORDER	D3016-A-1	0	SHEET 1 OF 1	NTS
DRAWN #	CHECKED	(R)	MFG. APPR.	E	APPROVED	M	DE APPR.	
DATE 10.0	.29 DATE	10:01.75	DATE	10,01.29	DATE 10.	01.29	DATE 10.01-29	

PURPOSE:
TO REVISE D3016-11 SADDLE'S HOLE SIZES

CHANGE:

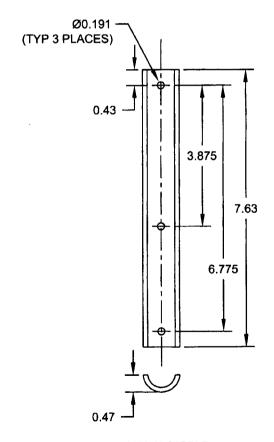
DETAIL D3016-11 SADDLE (SHEET 3): Ø0.257 TYP 3 PL WAS Ø0.191 (TYP 3 PLACES) AS SHOWN:

IS:



D3016-11 SADDLE

WAS:



D3016-11 SADDLE

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